## REMARKS

The specification has been amended to include reference to the related applications, as set forth in appendices A and B.

Claims 1-12 have been amended to better clarify that which the Applicants claim as their invention and were not made for reasons related to patentability. A clean version of the entire set of pending claims, and a marked-up version of the amended claims, are submitted herewith as Appendices A and B, respectively, for the Examiner's convenience. No new matter has been added by way of these amendments, and support can be found throughout the application, *e.g.*, Example 2.0, pages 20-21.

Applicants believe that there are no fees due in connection with the filing of this Amendment. However, if there are any other fees due in connection with the filing of this Amendment, please charge the fees to Deposit Account 08-0219. Also, please charge any fees underpaid or credit any fees overpaid to the same Deposit Account.

Respectfully submitted,

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# APPENDIX A

## AMENDMENT TO SPECIFICATION - CLEAN VERSION

On page 1, after the title, please insert the following paragraph:

This application is a continuation of U.S. Patent Application Serial No. 09/728,710, filed December 1, 2000 (abandoned), which is a continuation of U.S. Patent Application Serial No. 09/423,143, filed November 2, 1999 (abandoned), which is a U.S. National Stage Application of International Application No. PCT/GB98/01450 (WO 98/53083), filed on May 20, 1998, each of which is incorporated in its entirety by reference.

# APPENDIX B

## AMENDMENT TO SPECIFICATION – MARKED-UP VERSION

On page 1, after the title, please insert the following paragraph:

--This application is a continuation of U.S. Patent Application Serial No. 09/728,710, filed December 1, 2000 (abandoned), which is a continuation of U.S. Patent Application Serial No. 09/423,143, filed November 2, 1999 (abandoned), which is a U.S. National Stage Application of International Application No. PCT/GB98/01450 (WO 98/53083), filed on May 20, 1998, each of which is incorporated in its entirety by reference.--

# APPENDIX C

## PENDING CLAIMS 1-12 – CLEAN VERSION

1. (Amended) A vector for enhancing the inhibition of a selected target gene within an organism, comprising a gene silencing vector characterised in that said gene silencing vector includes an inverted repeat sequence that is complementary to a region of the vector and in reverse nucleotide.

2. (Amended) A vector as claimed in claim 1, in which said region of the vector and its inverted repeat sequence are synthetic polynucleotides.

3. (Amended) A vector as claimed in claim 1, in which the inverted repeat sequence is of all or part of the said gene silencing vector.

4. (Amended) A vector as claimed in claim 3, in which the inverted repeat sequence is of the 5'-untranslated region of the gene silencing vector.

5. (Amended) A vector as claimed in any of claims 1 to 4, in which the inverted repeat is separated from said region by a sequence of nucleotides.

6. (Amended) A method of controlling the expression of a DNA sequence in a target organism, comprising inserting into the genome of said organism an enhanced gene silencing vector as claimed in any of claims 1 to 5.

7. (Amended) A vector for enhanced gene silencing comprising in sequence a promoter region, a 5'-untranslated region, a transcribable DNA sequence and a 3'-untranslated region

containing a polyadenylation signal, characterised in that said gene silencing vector includes an inverted repeat sequence that is complementary to a region of the vector and in reverse nucleotide order.

8. (Amended) A vector as claimed in claim 7 in which the inverted repeat sequence is a fragment of the 5'-untranslated region.

9. (Amended) A vector as claimed in claim 7 or claim 8, in which the inverted repeat sequence is separated from the selected fragment by a sequence of nucleotides acting as a spacer.

10. (Amended) A vector as claimed in claim 7 or 8 or 9, in which the construct includes a double copy of the inverted repeat sequence.

11. (Amended) A vector as claimed in any of claims 7 to 10, in which the vector two tandem copies of the inverted repeat sequence.

12. (Amended) A DNA construct for the inhibition of gene expression comprising in sequence a promoter region, a 5'-untranslated region, a transcribable DNA sequence and a 3'-untranslated region containing a polyadenylation signal, characterised in that the said 5'-untranslated region is contiguous with a pair of tandem inverted repeat sequences of said untranslated region.

# APPENDIX D

## AMENDED CLAIMS 1-12 – MARKED-UP VERSION

1. (Amended) A vector for enhancing the inhibition of a selected target gene within an organism, comprising a gene silencing vector characterised in that [the] said gene silencing vector includes an inverted repeat sequence that is complementary to a region of the vector and in reverse nucleotide order [an inverted repeat of all or part of a polynucleotide region within the vector].

2. (Amended) A vector as claimed in claim 1, in which said region of the vector [the inverted repeat sequence is a synthetic polynucleotide sequence] and its inverted repeat sequence are synthetic polynucleotides.

3. (Amended) A vector as claimed in claim 1, in which the inverted repeat sequence is [an inverted repeat] of all or part of the said gene silencing vector.

4. (Amended) A vector as claimed in claim 3, in which the inverted repeat sequence is [an inverted repeat] of the 5'-untranslated region of the gene silencing vector.

5. (Amended) A vector [method] as claimed in any of claims 1 to 4, in which the inverted repeat is separated from said [the polynucleotide] region by a sequence of nucleotides.

6. (Amended) A method of controlling the expression of a DNA sequence in a target organism, comprising inserting into the genome of said organism an enhanced gene silencing vector as claimed in any of claims 1 to 5 [4].

7. (Amended) A vector for enhanced gene silencing comprising in sequence a promoter region, a 5'-untranslated region, a transcribable DNA sequence and a 3'-untranslated region containing a polyadenylation signal, characterised in that said gene silencing vector includes an inverted repeat sequence that is complementary to a region of the vector and in reverse nucleotide order [the said construct includes an inverted repeat of a region of said construct].

8. (Amended) A vector as claimed in claim 7 in which the inverted repeat sequence is a fragment of the 5'-untranslated region [of the said construct].

9. (Amended) A vector as claimed in claim 7 or claim 8, in which the inverted repeat sequence is separated from the selected fragment by a sequence of nucleotides acting as a spacer.

10. (Amended) A vector as claimed in claim 7 or 8 or 9, in which the construct includes a double copy of the inverted repeat sequence.

11. (Amended) A vector as claimed in any of claims 7 to 10, in which the vector two tandem copies of the inverted repeat sequence.

12. (Amended) A DNA construct for the inhibition of gene expression comprising in sequence a promoter region, a 5'-untranslated region, a transcribable DNA sequence and a 3'-untranslated region containing a polyadenylation signal, characterised in that the said 5'-untranslated region is contiguous with a pair of tandem inverted repeat[s] sequences of said untranslated region.